

Cloning

Leon Kass
"The Wisdom of Repugnance"

Prelims

Three types of cloning

1. Recombinant DNA technology or DNA cloning

- the transfer of a DNA fragment of interest from one organism to a self-replicating genetic element such as a bacterial plasmid. The DNA of interest can then be propagated in a foreign host cell. This technology has been around since the 1970s, and it has become a common practice in molecular biology labs today.

2. Reproductive cloning

- Reproductive cloning is a technology used to generate an animal that has the same nuclear DNA as another currently or previously existing animal.
- Dolly was created by reproductive cloning technology. In a process called "somatic cell nuclear transfer" (SCNT), scientists transfer genetic material from the nucleus of a donor adult cell to an egg whose nucleus, and thus its genetic material, has been removed.
- The reconstructed egg containing the DNA from a donor cell must be treated with chemicals or electric current in order to stimulate cell division. Once the cloned embryo reaches a suitable stage, it is transferred to the uterus of a female host where it continues to develop until birth.



Dolly the Sheep
1996-2003



"CC"
1st
cloned
cat.
(2002)

Three types of cloning cont.

3. Therapeutic cloning

- Therapeutic cloning, also called "embryo cloning," is the production of human embryos for use in research. The goal of this process is not to create cloned human beings, but rather to harvest stem cells that can be used to study human development and to treat disease.
- Stem cells are important to biomedical researchers because they can be used to generate virtually any type of specialized cell in the human body.
- Stem cells are extracted from the egg after it has divided for 5 days. The egg at this stage of development is called a blastocyst.
- The extraction process destroys the embryo, which raises a variety of ethical concerns.
- Many researchers hope that one day stem cells can be used to serve as replacement cells to treat heart disease, Alzheimer's, cancer, and other diseases.

Prelims

Two types of cloning vis-à-vis humans:

1. Non-reproductive human cloning.
(the goal is not to produce children; rather it's to advance in scientific research).
2. Reproductive human cloning.
(the primary goal is to have children)

Prelims

What's the motivation behind wanting cloned children?

- a) An infertile couple can have a child that is biological offspring of one of them.
- b) Genetic diseases can be screened for and remedied.
- c) A couple with a dying child can clone him/her so as to have a source of healthy blood or bone marrow

Kass' case against cloning

Kass has a two part case against human cloning.

1. He examines a non-consequentialist line of reasoning that relies on the fact that many people find cloning repulsive.
2. He examines the overwhelmingly bad consequences that will result from cloning.

"Wisdom of Repugnance"

"Revulsion is not an argument; and some of yesterday's repugnances are today calmly accepted.... In crucial cases, however, repugnance is the emotional expression of deep wisdom, beyond reason's power fully to articulate it. Can anyone really give an argument fully adequate to the horror which is father-daughter incest (even with consent), or having sex with animals, or mutilating a corpse, or eating human flesh, or even just (just!) raping or murdering another human being? Would anybody's failure to give full rational justification for his or her revulsion at these practices make that revulsion ethically suspect? Not at all. On the contrary, we are suspicious of those who think that they can rationalize away our horror, say, by trying to explain the enormity of incest with arguments only about the genetic risks of inbreeding.

Wisdom of Repugnance

The repugnance at human cloning belongs in this category. We are repelled by the prospect of cloning human beings...because we intuit and feel, immediately and without argument, the violation of things that we rightfully hold dear. Repugnance, here as elsewhere, revolts against the excesses of human willfulness, warning us not to transgress what is unspeakably profound. Indeed, in this age in which everything is held to be permissible so long as it is freely done, in which our given human nature no longer commands respect, in which our bodies are regarded as mere instruments of our autonomous rational wills, repugnance may be the only voice left that speaks up to defend the central core of our humanity. Shallow are the souls that have forgotten how to shudder." (Reader pg 28)

What is the Wisdom of Repugnance argument?

Kass' Three consequentialist arguments against cloning

1. "Cloning threatens confusion of identity and individuality"
2. "Cloning represents a giant step toward transforming procreation into manufacture."
3. "Cloning represents a form of despotism of the cloners over the cloned." (Reader pg. 30)

1. Confusion of identity and individuality

- "The cloned person may experience concerns about his distinctive identity not only because he will be in genotype and appearance identical to another human being, but, in this case, because he may also be twin to the person who is his "father" or "mother""
 - » People will be likely to compare his performance with his alter ego
- Advocates of cloning claim that the clone would not be the same person, but it seems that the types of clones are more likely to be extremely smart and talented people not the average Joe.
- Advocates insist on consent, but this "unwittingly reveals the problem of identity in all cloning."
 - » "If the clone of Mel Gibson would not be Mel Gibson, why should Mel Gibson have grounds to object that someone had been made his clone?"
- "Social identity and social ties of relationship and responsibility are widely connected to ...biological kinship." Cloning disrupts this, e.g., who is his/her father, mother, grandfather, etc?

2. Cloning transforms procreation into manufacture.

"Human nature becomes merely the last part of nature to succumb to the technological project, which turns all of nature into raw material at human disposal..." (reader 33)

"Such an arrangement is profoundly dehumanizing, no matter how good the product." (reader 33)

Slippery slope argument: Genetic and reproductive biotechnology companies are already growth industries, but they will go into commercial orbit.... Supply will create enormous demand. Even before the capacity for human cloning arrives, established companies will have invested in the harvesting of eggs from ovaries obtained at autopsy or through ovarian surgery, practiced embryonic genetic alteration, and initiated the stockpiling of surrogate-womb services, and through the buying and selling of tissues and embryos, priced according to the merit of the donor, the commodification of nascent human life will be unstoppable."

3. Cloning represents a form of despotism

“Cloning is inherently despotic, for it seeks to make one’s children (or someone else’s children) after one’s own image (or an image of one’s choosing) and their future according to one’s will. In some cases, the despotism may be mild and benevolent. In other cases, it will be mischievous and downright tyrannical. But despotism—the control of another through one’s will—it inevitably will be.” (reader 34)

Kass’ reply to some objections

“Right to Reproduce”

We have a right to reproduce. “We already practice early forms of unnatural, artificial and extramarital reproduction, and we already practice early forms of eugenic choice.” Thus, cloning is no big deal.

Kass’ reply: Although we have a “right to reproduce”, this does not mean that all means of reproduction are permissible. E.g., polygamy, sale of babies, etc.

“When the exercise of previously innocuous freedom now involves or impinges on troublesome practices that the original freedom never was intended to reach, the general presumption of liberty needs to be reconsidered.” (reader, 35)

Kass’ reply to some objections

Cloning is not different from “negative eugenic selection, through genetic screening and prenatal diagnosis.”

Kass has no objection to therapy, but “therapy, to be therapy, implies not only an existing ‘patient’, [but also] a norm of health.”

“Proponents want us to believe that there are legitimate uses of cloning that can be distinguished from illegitimate uses, but by they own principle no such limits can be found.” (reader, 35)